

**CASTING OF ONE THOUSAND 32 POUNDS.**

—Having heard that instructions had been forwarded to the Low Moor Iron Works for the execution of the enormous number of one thousand pieces of ordnance of large calibre, we determined upon learning the particulars on the spot, and in so doing were fortunate enough to be present at the actual casting of them. Each gun is cast perfectly solid, in a clay mould, suspended perpendicularly in a metal casting, and such is the bulk of iron employed, and so great is its power of retaining the heat, that each piece takes nearly a week to cool before it can be further meddled with. For instance, on Monday evening last we could not bear to place the hand on the outer clay-covering of a gun cast on the previous Saturday morning, and several days must elapse before the metal itself can be touched with impunity. The guns are drilled out with powerful machinery, and if the bore, which is gauged with the nicest possible precision, is found to vary a half's breadth, it is at once sent to the furnace, and melted over again. If, however, the bore is found to be mathematically true, it is polished, also by machinery, till it is as smooth as glass and as glittering as silver. The crown and royal initials are then chiselled out just above the touch-hole, and after receiving a final scrutinizing inspection, the gun is sent by the Manchester and Leeds Railway to Hull, and thence transported in coasters to Woolwich. Here it is subjected to the ordnance test. If it carry its range truly, and without exhibiting any symptom of inferiority of material, and corresponds in all respects with the drawing, it receives the Government impress, and, being freed from the rust which it has most likely acquired in its transit, is pronounced fit for service, and placed in the stores accordingly. If, on the contrary, it should, in the minutest particular, fall below the ordinary standard, one of the trunnions is struck off, so as to render the gun utterly useless, and it is then returned at the cost of the maker.—*Liverpool Journal.*

**NEW MOTIVE POWER.**—M. Selligues, who some short time since reported to the Académie des Sciences a discovery of a motive power which he then thought would be a substitute for steam, and which consists of combining atmospheric air with hydrogen gas, by which an explosion is produced when ignited, has, at a recent meeting of the academy, made another communication, from which it now appears that the detonating power ceases under pressure. This phenomenon has proved an obstacle to the experiments of M. Selligues before the Committee appointed by the Academy. Notwithstanding the difficulties which have interposed themselves, M. Arago has convinced himself of the importance of the discovery, and has reported to the Academy that with so small a quantity as 3 to 5 litres (6 to 10 pints) of hydrogen gas, mixed with atmospheric air, a weight of 1000 kilogrammes (= 2205 lb.) was rapidly raised to the height of 3 feet.

**MOVEMENT TO CHANGE THE POST.**—It is the wish of some of the principal residents in the neighbourhood of Ipswich to erect a monument to the memory of the Rev. George Crabbe, to be fixed in the church of his birthplace, Aldeburgh, and to intrust the erection of the same to Mr. Thomas Thurlow, sculptor, of Saxmundham, believing that many would be gratified by the opportunity of contributing to a work intended to make known their feelings of his genius as a poet, and his character as a man. A subscription has already commenced; among the names most familiar to us we observe those of Samuel Rogers, Esq., Rev. Wm. Harness, Rev. Alex. Dyce, and the Hon. A. Thellusson.

**FOUNDATION WEAKENED BY RAILWAY EXCAVATIONS.**—Last Sunday week, during the performance of Divine service at the church of St. Germain, at Rouen, a sudden cracking was heard, and most of the congregation, in alarm, left the church. It is supposed that the foundation has been weakened by some of the excavations of the Rouen and Havre Railroad near the spot.—*Galignani.*

**BRITISH ARCHÆOLOGICAL ASSOCIATION.**—At a full meeting of this association, held last Saturday, it was resolved that the second annual meeting should be held at Winchester, in the summer of 1845.

**THE METROPOLITAN IMPROVEMENTS.**—At the east end, the new street is completely marked out from Spitalfields' Church to the London Docks, the vaults for the buildings on either side, between High-street, White-chapel, and Spitalfields' Church, being erected, and a sewer above 1,200 feet in length having been formed. In Cranbourne-street, formerly Cranbourne-alley, several first rate edifices are being erected which will be finished in a few months, and south of Sidney-alley, where the openlog will be, to form the line from Coventry-street, the houses are also nearly finished. Along the line between Oxford-street and Holborn, the gas-pipes are all laid down, and the water-pipes are being now placed in the ground. At the lower end of Plumtree-street three large houses are being built in the Elizabethan style, with red bricks and stone, under the direction of Mr. Penpethorn, the government architect, as designs after which others are to be erected in that neighbourhood. Nearly adjoining these, a French Protestant church, with school attached, will be raised, the ground being excavated for that object. During the last few days about a dozen houses have been cleared away to form the line into Broad-street from Great St. Andrew's-street, which has much improved that locality. In Belton-street, Christ Church, which is in the parish of St. Giles, and which is formed of Kentish rag and bricks, approaches completion.

**BETTER SUPPLY OF PURE WATER IN LONDON.**—Mr. H. Phillips, the common councilman, in the court of which he is a member, has moved, that it be referred to a committee to consider the best means of securing to all classes of the citizens of London a pure, abundant, and forcible supply of water, at a reasonable charge, and that they report thereon. After some observations upon the monopoly of the New River Company, the subject was referred to the Commissioners of Sewers. Upon the motion of the same gentleman, it was referred to the same committee to consider and report to the court the best means of providing for the poor a better supply of pure water in different parts of the city than is at present afforded to them.

**VICTORIA-PARK.**—The workmen have commenced laying down the oak posts and railings on the boundary adjacent to the Grove-road. The line of road has been struck out for the new iron ornamental bridge, which is to cross the Regent's canal at Bonner's hall, and a circle has also been made for a handsome carriage-drive to the chief entrance from Bethnal-green. The improvements on the Old Ford-road, which partly runs through the site of the park, have been nearly completed.

**MODEL COTTAGES FOR LABOURERS.**—Twenty cottages are in progress of erection by the Society for Improving the Condition of the Labouring classes, on the estate of Lord Callhorpe, near the Gray's-inn-road, London. They will each be inhabited by one deserving labourer's family, and will be fitted up with the greatest regard to the comfort and cleanliness of the occupier. The main object of the society in the erection of these cottages is that they may serve as a model for such buildings to the aristocracy who may visit the metropolis.

**EXTRAORDINARY FIRE TREE.**—Lately was dug from a field belonging to Mr. W. Cundall, of Crowle, an English fir tree of the extraordinary length of ninety-three feet, its girth in the middle being sixty-eight inches. It was discovered buried in the peat by Mr. P. Hale, who is in the habit of searching for wood in the immense subterranean forest which exists around Crowle.

**THE NEW DOCK AT HULL.**—We understand the intended site of the new dock has been definitely fixed on the east side of the present Outfall, and that several very important improvements are contemplated. A meeting of the dock company was to have been held yesterday, for the purpose of receiving Mr. Rendel's report, &c.—*Eastern Counties' Herald.*

**MODEL HOSPITAL IN PARIS.**—A large model hospital, to be called the Hôpital Louis Philippe, is about to be built by the municipality of Paris, near the station of the Northern Railroad, on the ground situated at the northern extremity of the rues du Faubourg, St. Denis, and St. Martin.

**ROYAL INSTITUTE OF BRITISH ARCHITECTS.**—The first ordinary meeting of the Royal Institute of British Architects took place on Monday evening last at the rooms of the society, in Grosvenor-street, Mr. Papworth in the chair. After some routine business, including the election of a new fellow, a list of donations was read, consisting chiefly of books and prints. The chairman said he was desired by the council to state that they were well aware that there existed a considerable amount of talent and information among the junior members of the institute, who were only withheld by modesty from imparting that information to others, and that they were desirous of giving these persons every opportunity of so doing whenever they chose to come forward. A paper was read by the secretary on the painted decorations of the early Italian churches.

**ACCIDENT AT NORTHEACH PRISON.**—On Wednesday the new wing of this building, recently erected, fell in with a tremendous crash, owing to the buttments giving way in consequence of the heavy fall of rain. Very fortunately no person sustained any injury by the accident, the workmen having left a few minutes before.—*Cheltenham Chronicle.*

**FIRE IN LONDON.**—From the records in possession of the London Fire Brigade, it appears that no fewer than 800 fires have occurred in the present year; but that they have not been of so extensive a character as in former years. The number of lives lost, however, is, we regret to say, much greater than the average.

**Tenders.**

TENDERS delivered this day for alterations, &c., at Dr. Riding's, Easton-square.—Henry Baker, Esq., 11, Upper Gower-street, Architect.

Messrs. Piper .....	£958
Mr. Winsland .....	897
Messrs. Cabitt .....	890
Messrs. Pearse and Guerrier ....	889

The above Tenders were opened in the presence of the Builders.

TENDERS for alterations and finishing Four Houses in Sumer-gardens, Bayswater.—R. P. Brown, Esq., Architect, Clement's-lane, City.

Ashby .....	£6,473
Howard and Nixon .....	6,340
Haynes and Co. ....	6,324
Piper and Sons .....	6,114
Trego .....	5,775
King and Co., Islington .....	5,678
Winsland .....	5,344

**NOTICES OF CONTRACTS.**

For the making of Sluices, Bridges, Excavations, and other works in the New Cut from the Sixteen-foot River to the Eau Brink.—George Game Day, Clerk to the Middle Level Drainage Commissioners, St. Ives. Plans and Specifications are being prepared.

For Paving and Repairing certain Carriage and Footways in the district of Knightsbridge, for one year from Christmas-day next, and also for Lighting the same district with Gas for the like period.—James Rogers, 22, Manchester-buildings, Westminster. December 9.

For building an Infirmary at the County Gaol and House of Correction, at Ipswich, Suffolk.—Mr. John Whiting, County Surveyor, Ipswich, or Mr. John H. Borton, Clerk of the Peace, Bury St. Edmunds. December 10.

For erection of a Warehouse upon the south side of the Old Dock in the town of Kingston-upon-Hull.—W. H. Hufham, Secretary, Dock-office, Kingston-upon-Hull. Dec. 10.

For the Works necessary in arching the public Sewer, and taking up a portion of the old Sewer, in length about 185 feet, in Mile-end Old Town. Also for building a barrelled Drain at the back of the Tyssen Arms, Dalston, in length about 505 feet.—John William Unwin, Clerk to the Commissioners of Sewers for the Tower Hamlets. December 10.

For the erection of a new Barrack Establishment at Bristol.—C. J. Selwyn, Major and Commanding Royal Engineer, Exeter. December 11.

For Lighting the Southampton Paving Trust with Naphtha or other strong Light for the period of eight months from the 1st of February next.—John Arnell, 10, Edmund-street, Hampstead-road. December 11.